

FIG. 3

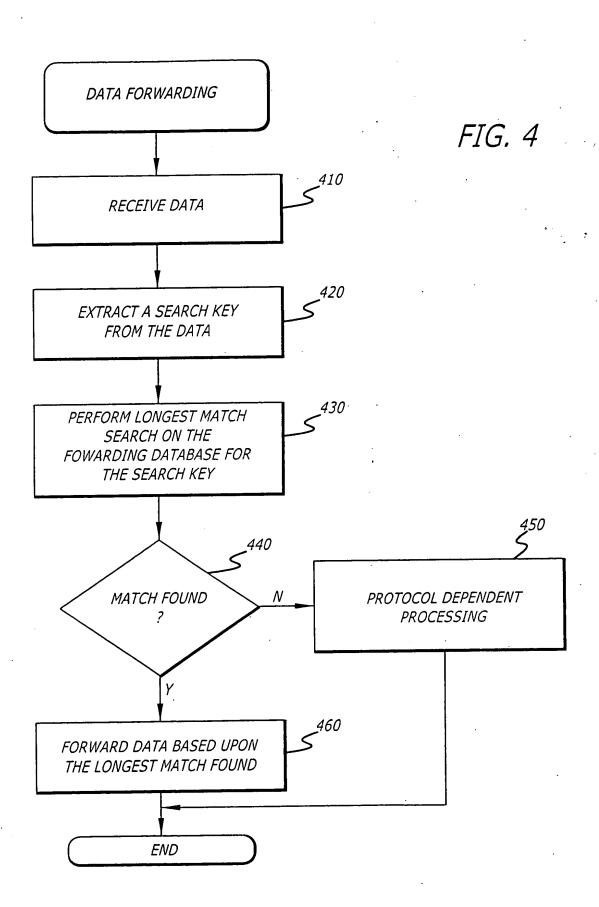
						_			
	00001010.0000001.00000010.010000001	000001011.00000001.00000010 .00000000	000001011.00000001.00000000.0000000	00001011 .0000000.0000000.0000000		857	 0000101.0000001.0000001.0000001.00000000	11111111.111111111111111111111111111111	
\	11.1.2.65	11.1.2.0/24	11.1.0.0/16	11.0.0.0/8	FIG. 8	MSB)000 	1111	
	DESTINATION ADDRESS:	ROUTE #1	ROUTE #2	ROUTE #3			810 SEARCH KEY:	820 CURRENT MASK:	
	310	320	330	340			87	i 66	

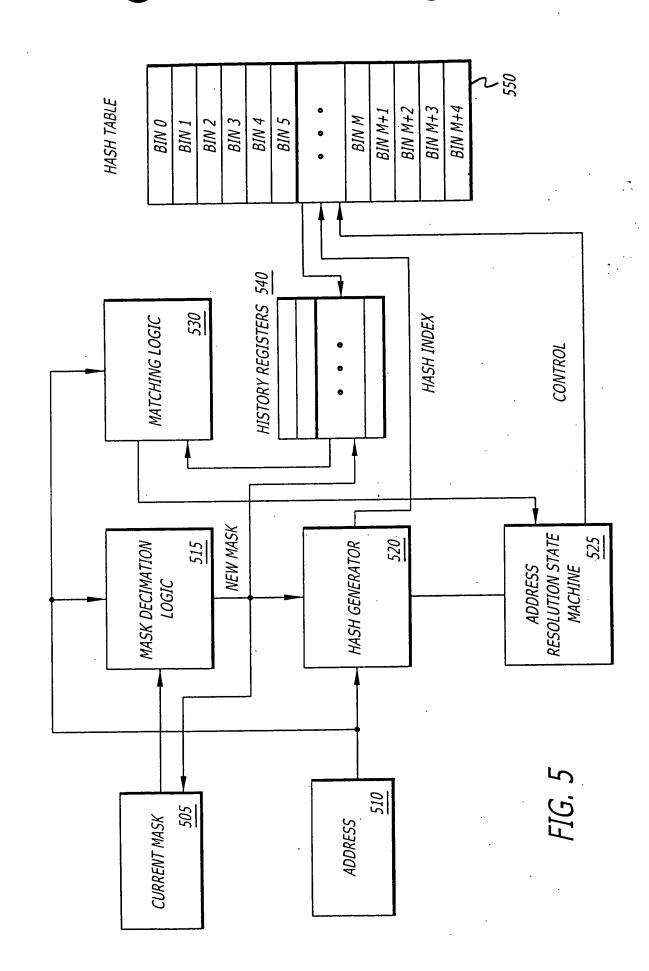
16

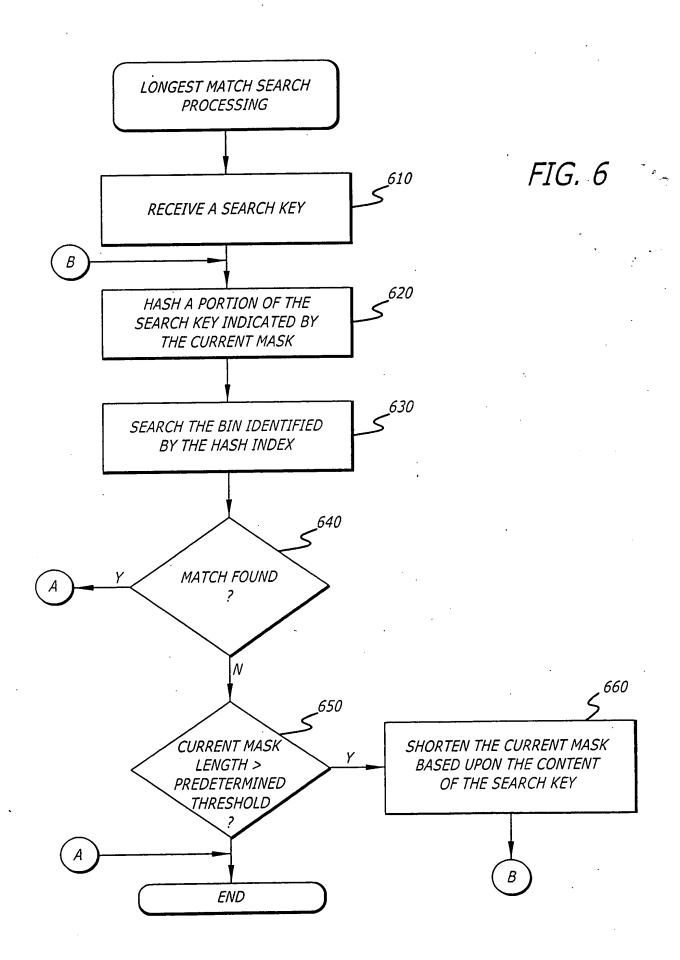
NEXT MASK:

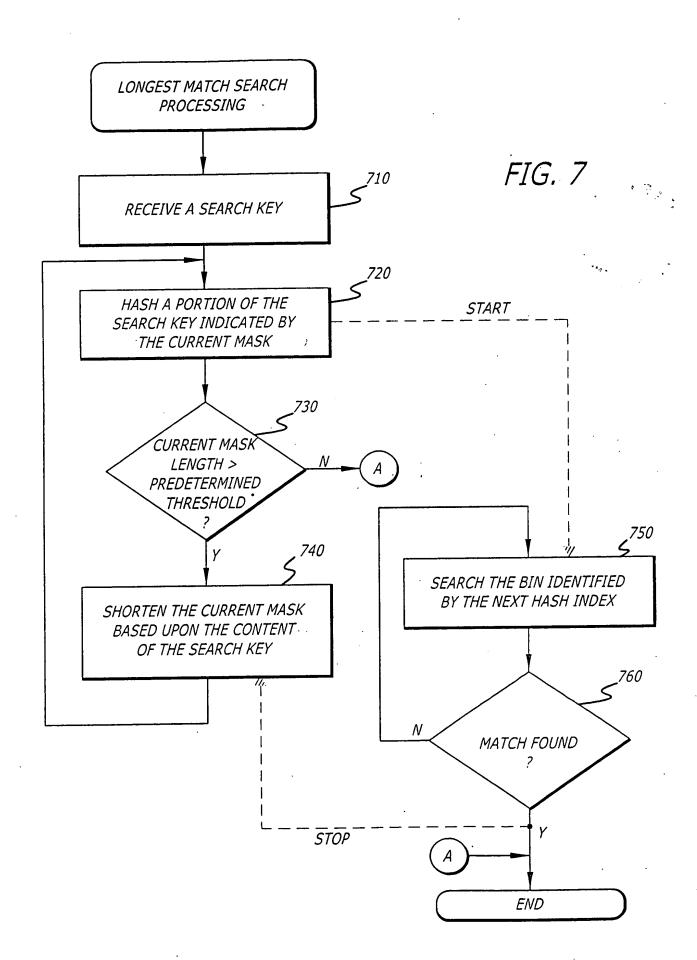
830

BIT POSITION









BIT-WISE MASK DECIMATION

					•
310	ADDRESS (HEX)	ITERATION	MASK (HEX)	MASKED ADDRESS (HEX)	
ع الم	OB 01 02 41	1	FF FF FF FF	0B 01 02 41	
		2	FF FF FF FE	0B 01 02 40	
		3	FF FF FF FC	0B 01 02 40	4.
		4	FF FF FF F8	0B 01 02 40	· · ·
		5	FF FF FF F0	0B 01 02 40	
		6	FF FF FF E0	0B 01 02 40	
		7.	FF FF FF CO	0B 01 02 40	
		8	FF FF FF 80	0B 01 02 00	─ MATCH

FIG. 9

ADDRESS-SENSITIVE MASK DECIMATION

310	ADDRESS (HEX)	ITERATION	MASK (HEX)	MASKED ADDRESS (HEX)	
تا ا	OB 01 02 41	1 .	FF FF FF FF	0B 01 02 41	•
		2	FF FF FF FE	OB 01 02 40	
		3	FF FF FF 80	0B 01 02 00	MATCH
		4	FF FF 00 00	OB 01 00 00	
		5	FF 00 00 00	0B 00 00 00	

FIG. 10

ADDRESS	0 0 0	MASK	
00011000 00010000 0000010 00001000		00000000 111111111111111111111111111111	_1110
00011000 00010000 00000000 00011000		2111 2 0000000 0000000 11111111 11111111	_1115
0 0			
00011000 00000000 00000000 00011000		11111111 00000000 00000000 11111111	_1120

FIG. 11A (Prior Art)

	• • •	MASK LENGTH	, —1
00011000 00010000 0000100 00001000		11000	2 1175
00011000 00010000 00001000 00011000		01000	7 1130
0 0			
00011000 00000000 00000000 00011000		00100	7 1135

FIG. 11B (Prior Art)

ADDRESS + MASK INFORMATION	• • •	
0 00011000 10001000 0000100 10001000 0		2 1140
0 00011000 00010000 10000000 00011000		7 1145
0		
0 00011000 1 0000000 0000000 1 00011000		1150

FIG. 11C